

## 1. Wenlock Cross(CLT BBS)

London, United Kingdom



- Europe's tallest hybrid cross-laminated timber high-rise building.
- It is a 10-storey residential building with commercial spaces.
- Uses a hybrid construction of cross-laminated timber (CLT BBS) and steel.
- All parts are delivered from the factory to the site.
- The building is cladded with slatted cedar and bricks tiles.
- Only the walls, floor slabs are using CLT BBS, while the structure are using steel.

### **CLT BBS Advantages:**

- Cost-effective and ecological sustainable.
- Meets standard requirements in terms of structural physics and fire protection.
- Slim, lightweight designs compared to concrete.
- Fully recyclable. (99.4% wood and 0.6% glue)

Source:

1. <http://www.binderholz.com/en/construction-solutions/residential-buildings/wenlock-road-london-united-kingdom/>
2. <http://www.binderholz.com/en/basic-products/clt-bbs/>
3. <http://www.binderholz.com/en/construction-solutions/why-solid-timber-construction/>
4. <https://vimeo.com/133730258>

## 2. Metropol Parasol (Kerto LVL)

Seville, Spain



- One of the largest timber constructions in the world – built from 3,400 individual wooden elements and 3,000 load-bearing connection nodes.
- Its role as a unique urban space within the dense fabric of the medieval inner city. Allows a variety of activities such as, history, leisure, and commerce.
- Approximately 50m long, 75m wide and 28m high.
- Construction elements used are glued **Kerto laminated veneer lumber (LVL)**.
- Over 3,000 elements were manufactured at the factory.
- The structure is laminated with 2-c-polyurethane to protect against the weather.

### Laminated Veneer Lumber (LVL)

- Manufactured by Metsä Wood ([www.metsawood.com](http://www.metsawood.com))
- LVL can be used in beams, joists, trusses, frames, components of roof, floor and wall elements, components of door, concrete formwork and scaffold planking.
- Sheets of timber are glued together to become a whole solid lumber.

Source:

1. <http://www.metsawood.com/global/news-media/references/Pages/metropol-parasol-urban-centre.aspx>
2. <http://www.metsawood.com/global/Products/kerto/Pages/Kerto.aspx>